

A Balanced Key Management

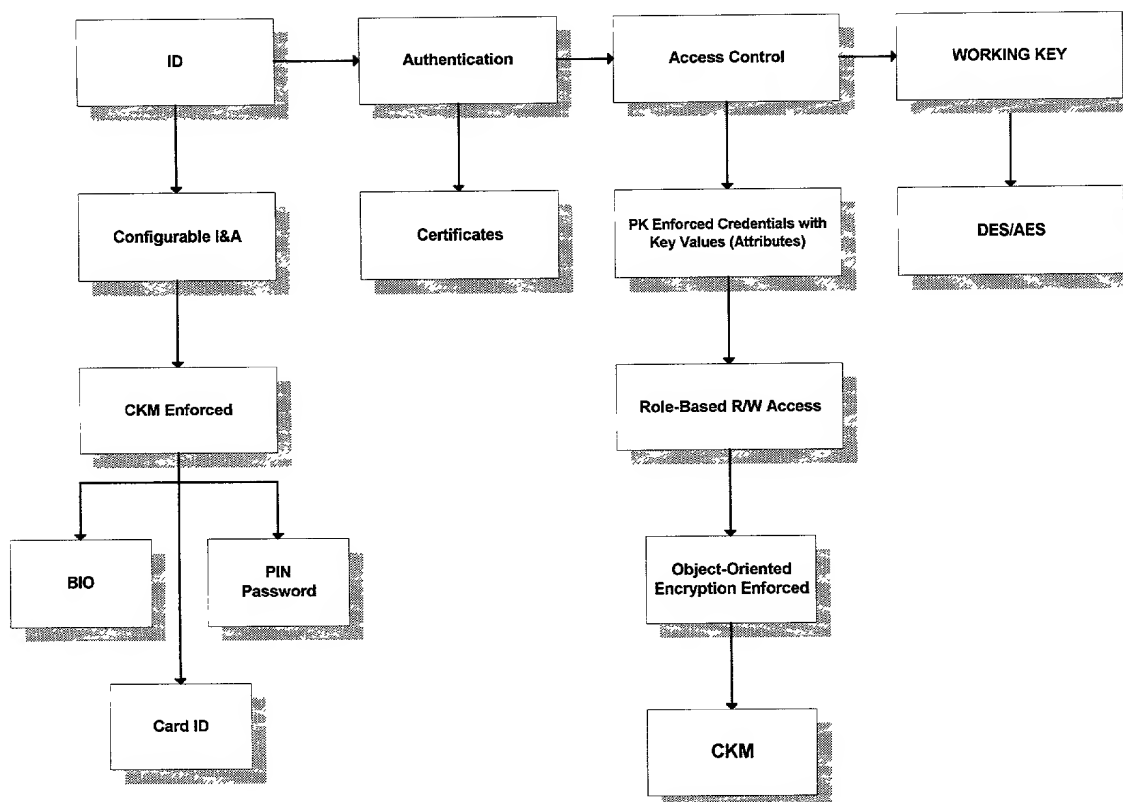


FIG. 1

Smart Token Avenue to Comprehensive Security

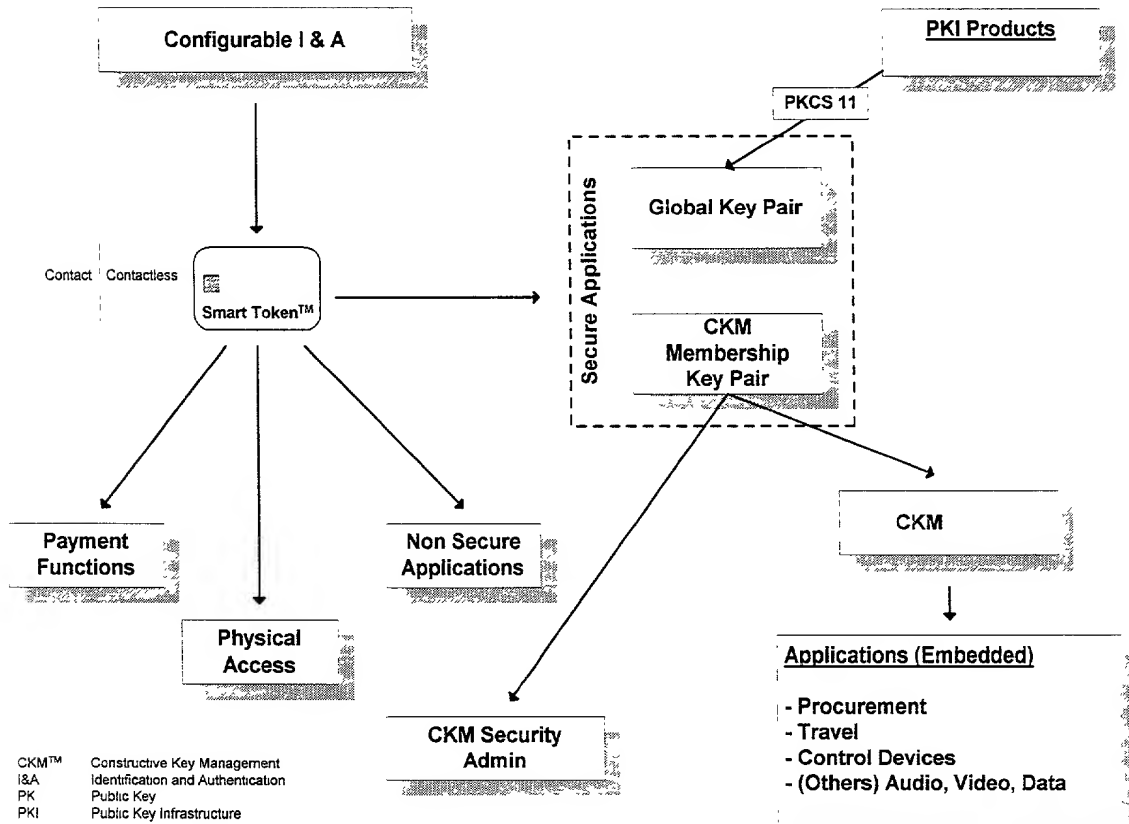


FIG. 2

Diffie-Hellman Random Value Encryption and Decryption

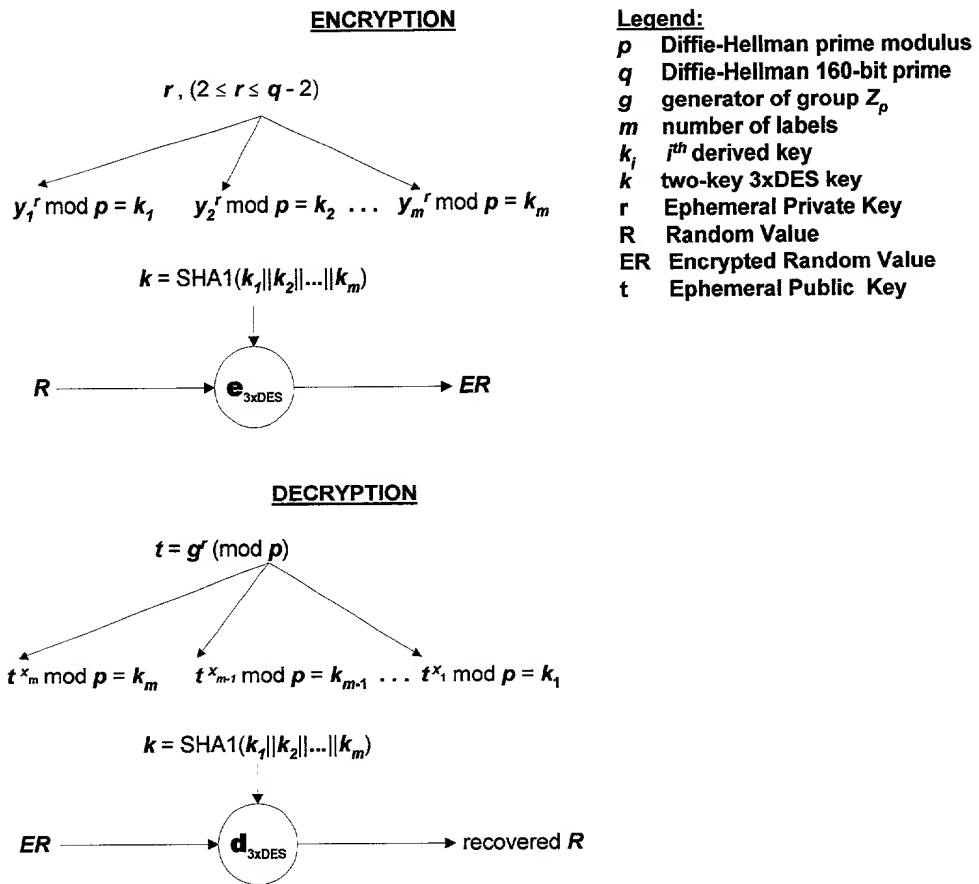


FIG. 3

Combiner Function

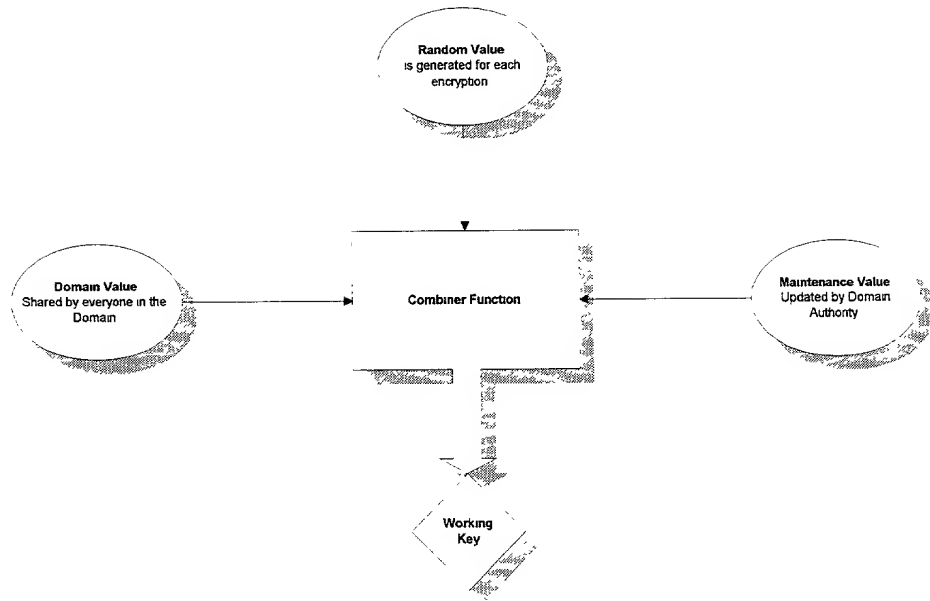


FIG. 4

Combiner Function Using Triple DES CBC Mode

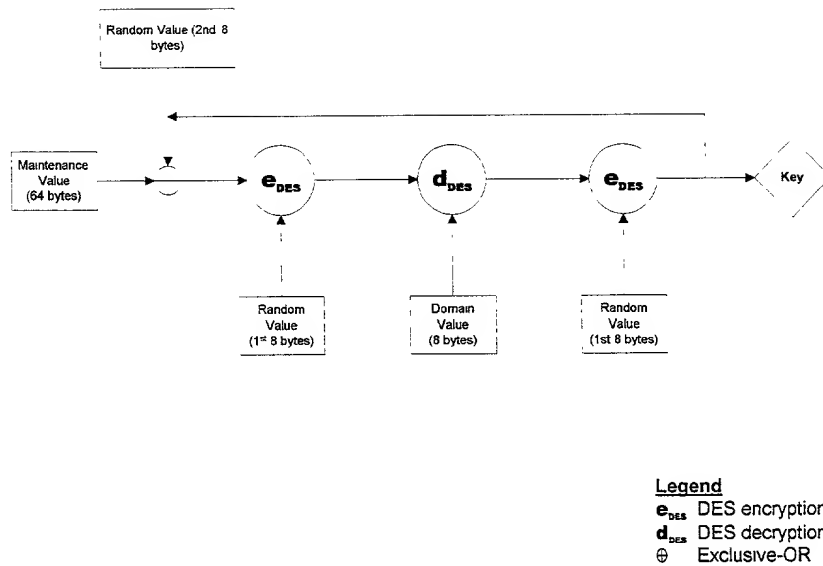


FIG. 5

Encryption using CKM, 3xDES and Diffie-Hellman

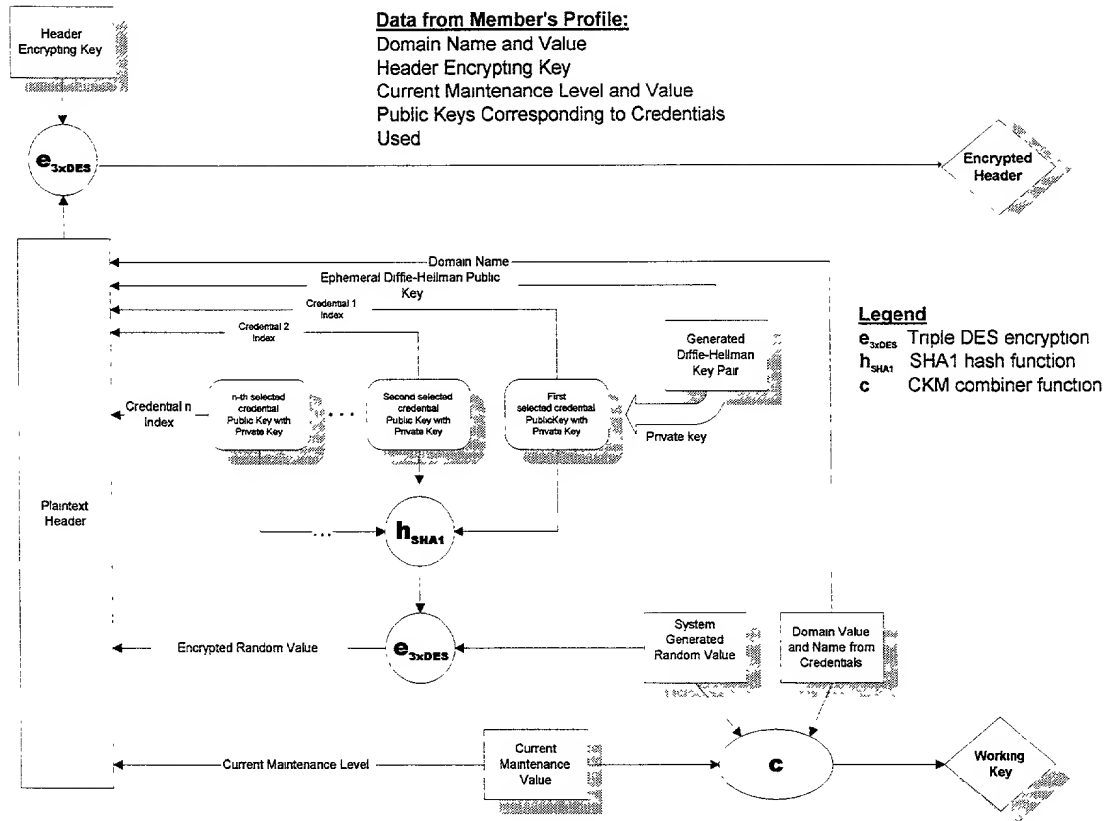
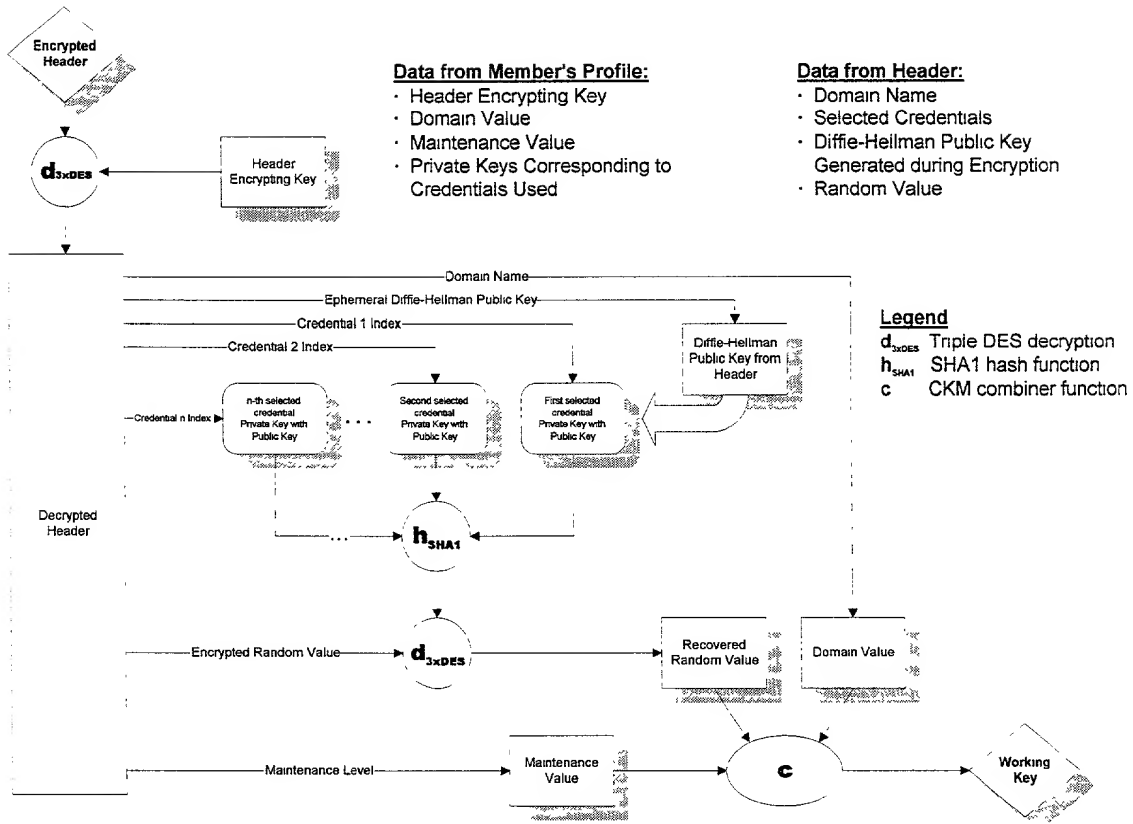


FIG. 6

FIG. 7

Decryption using CKM, 3xDES and Diffie-Hellman



Encryption using CKM, 3xDES and RSA

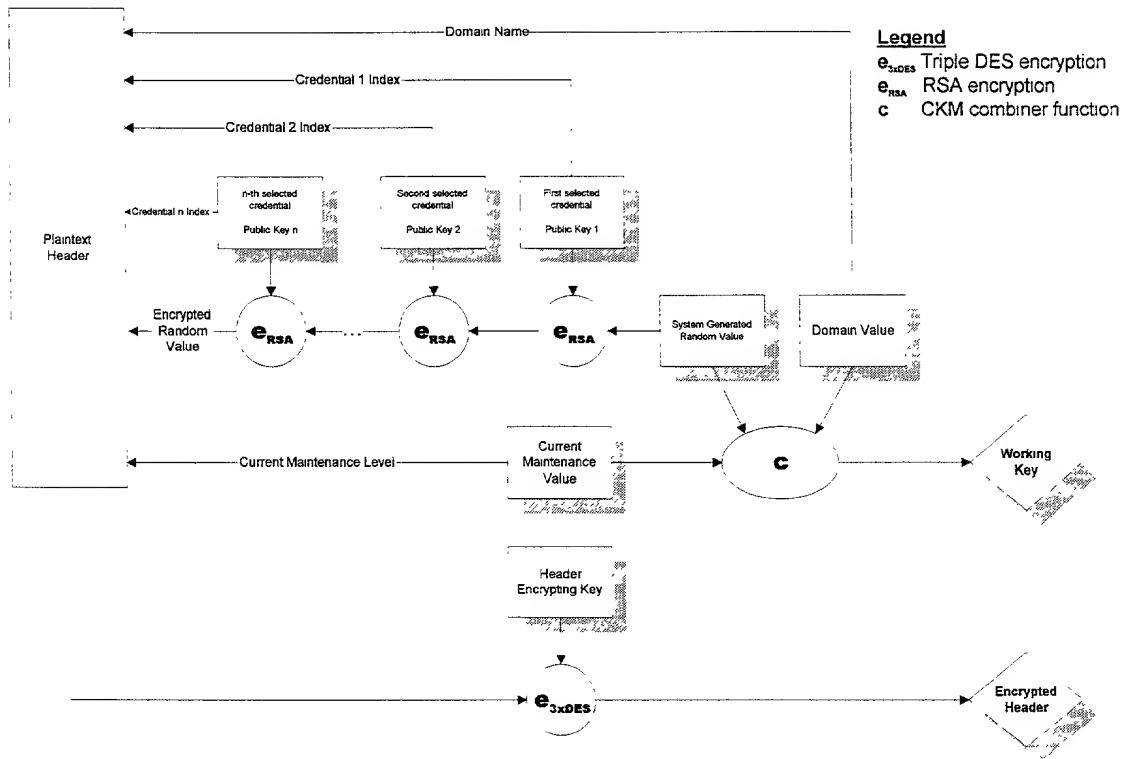


FIG. 8

Decryption using CKM, 3xDES and RSA

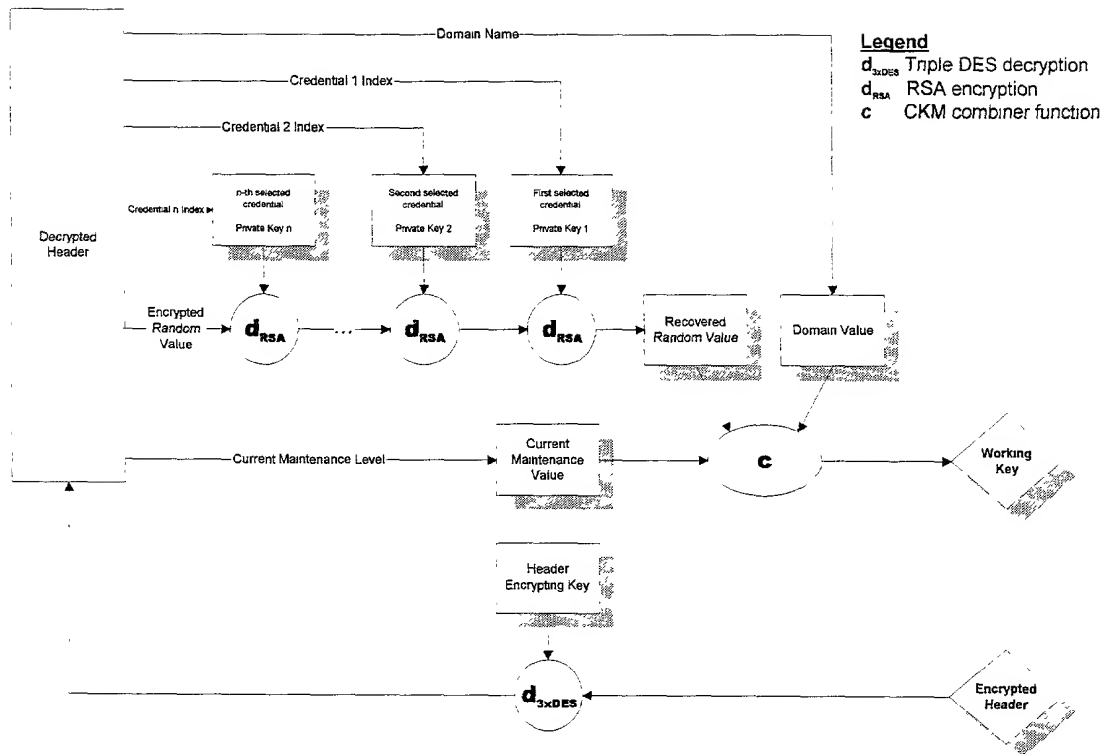


FIG. 9

FIG. 10

Maintenance Value and Header Encrypting Key Generation

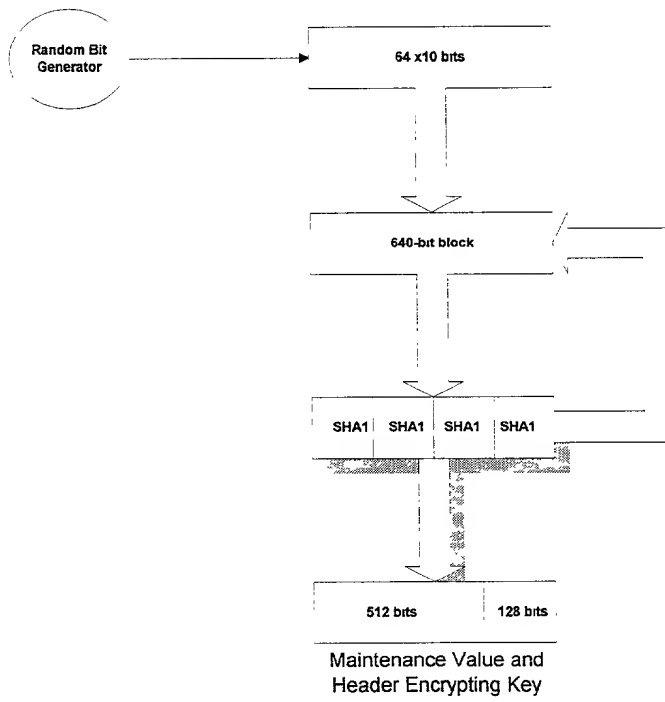


FIG. 11

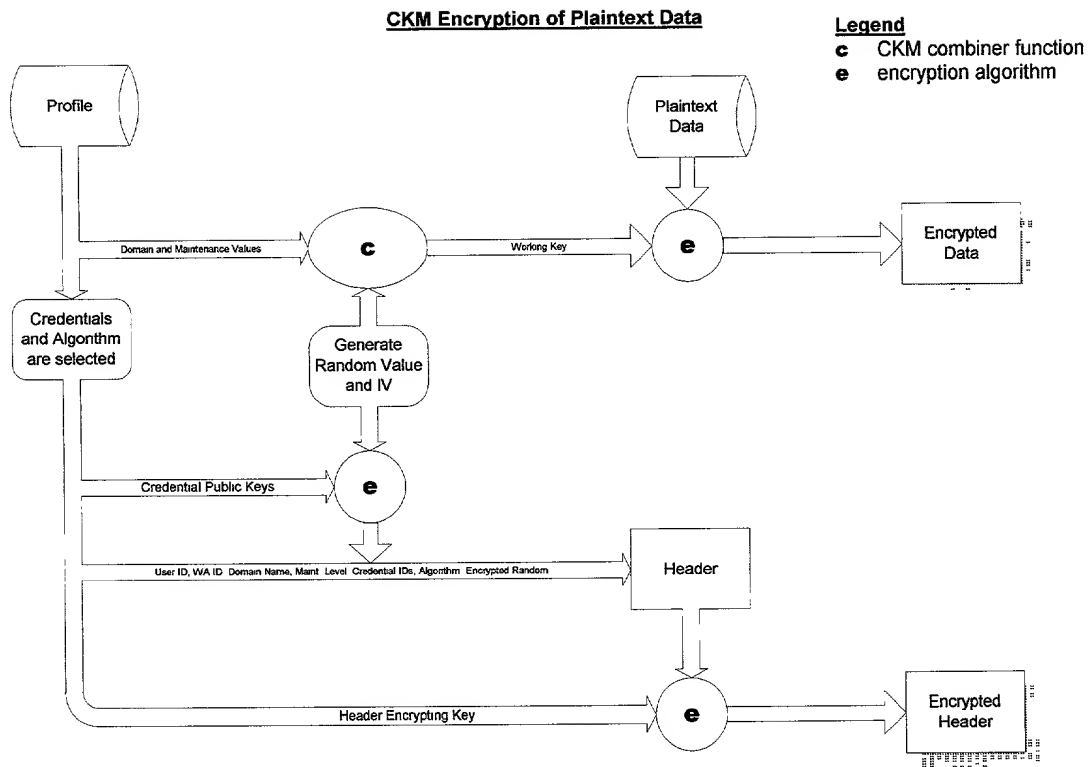


FIG. 12

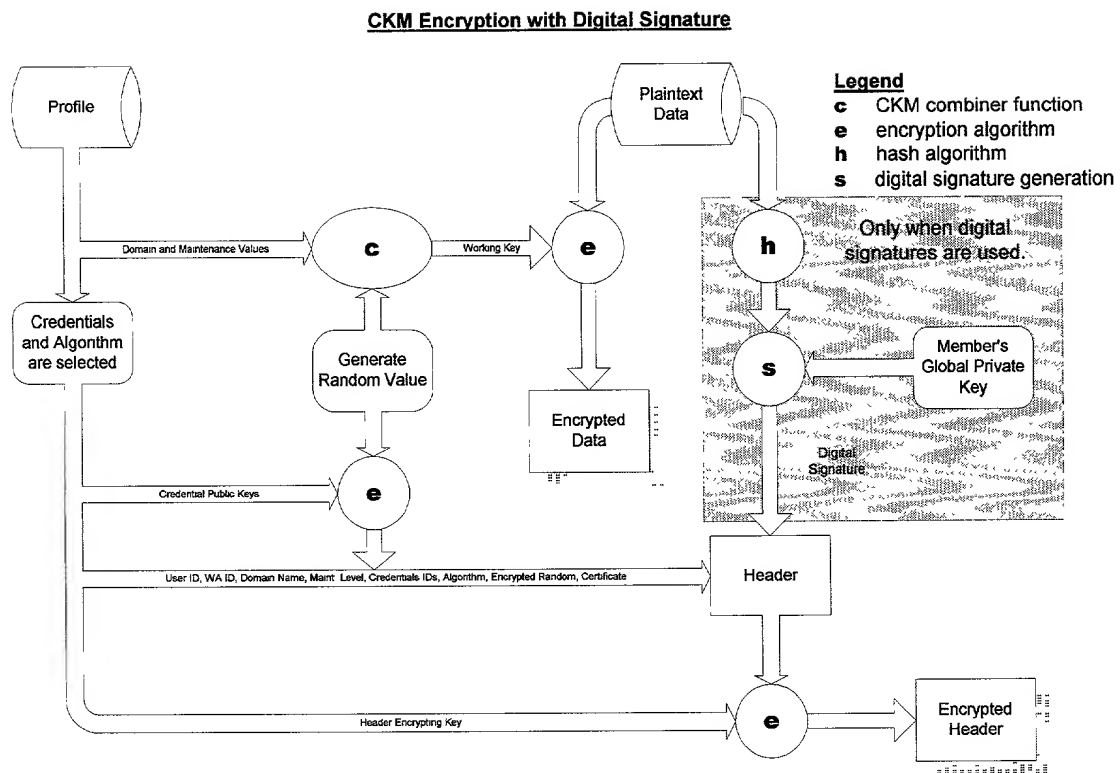
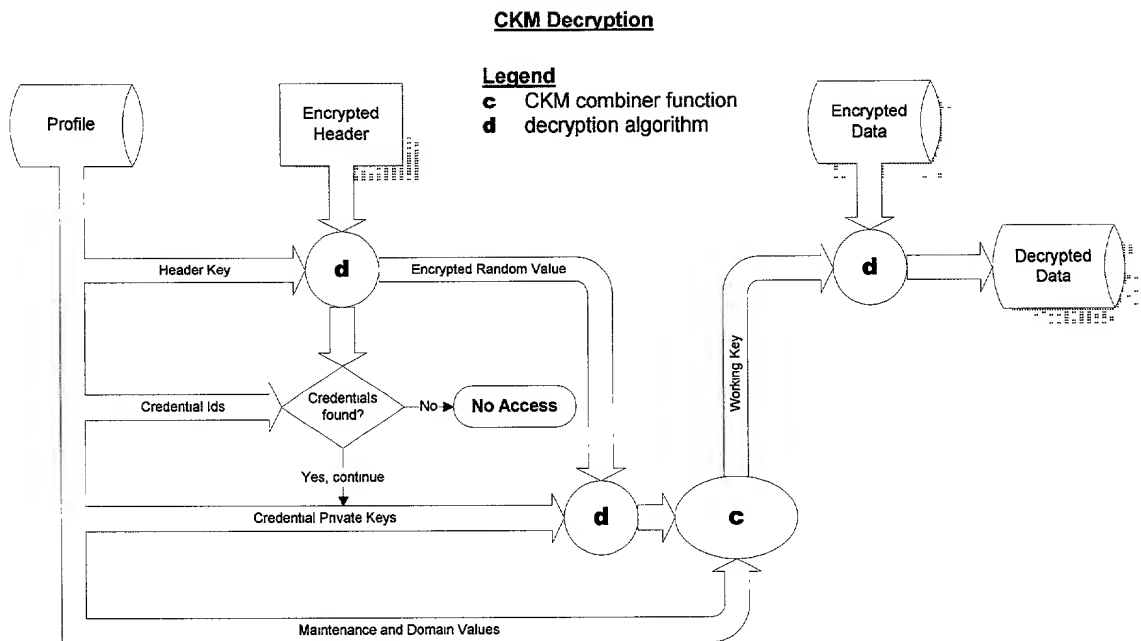


FIG. 13



CKM Decryption with Digital Signature Verification

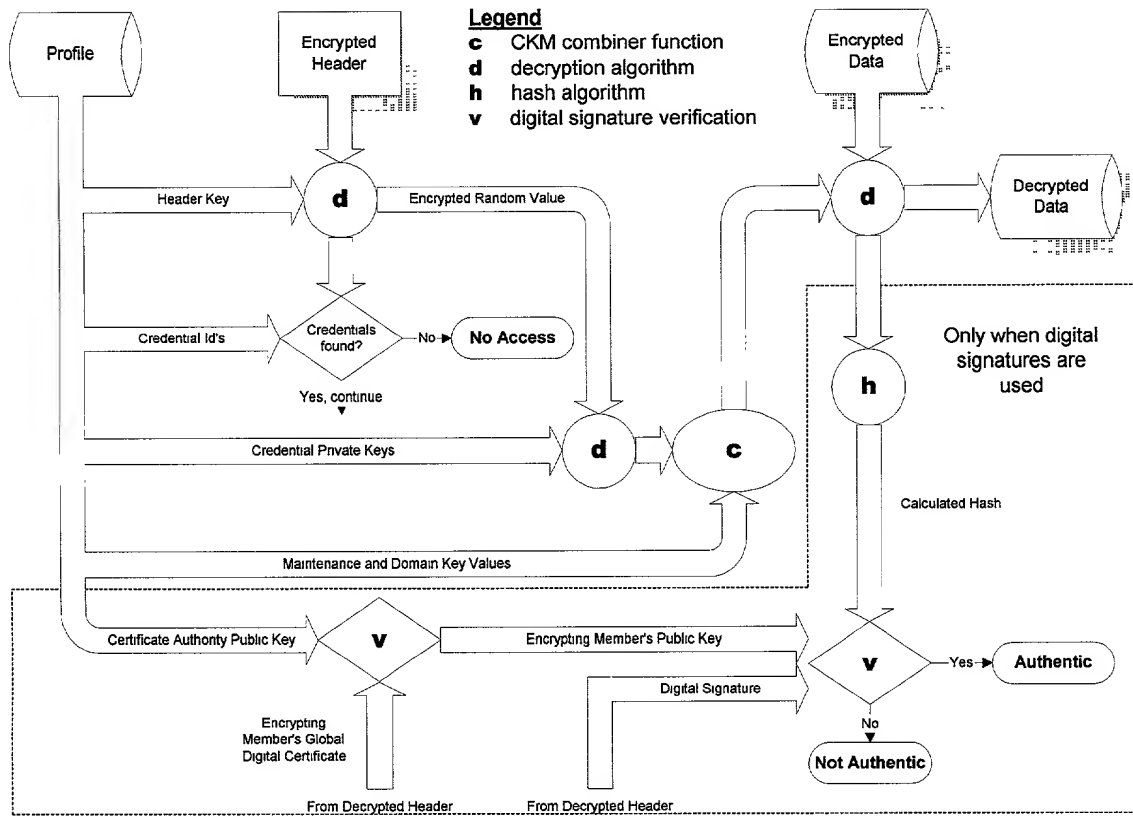


FIG. 14

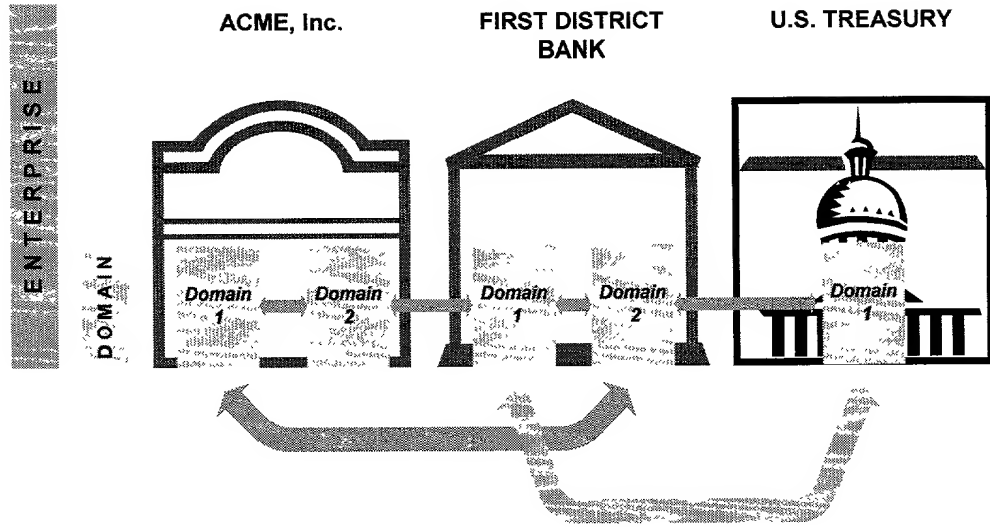


FIG. 15

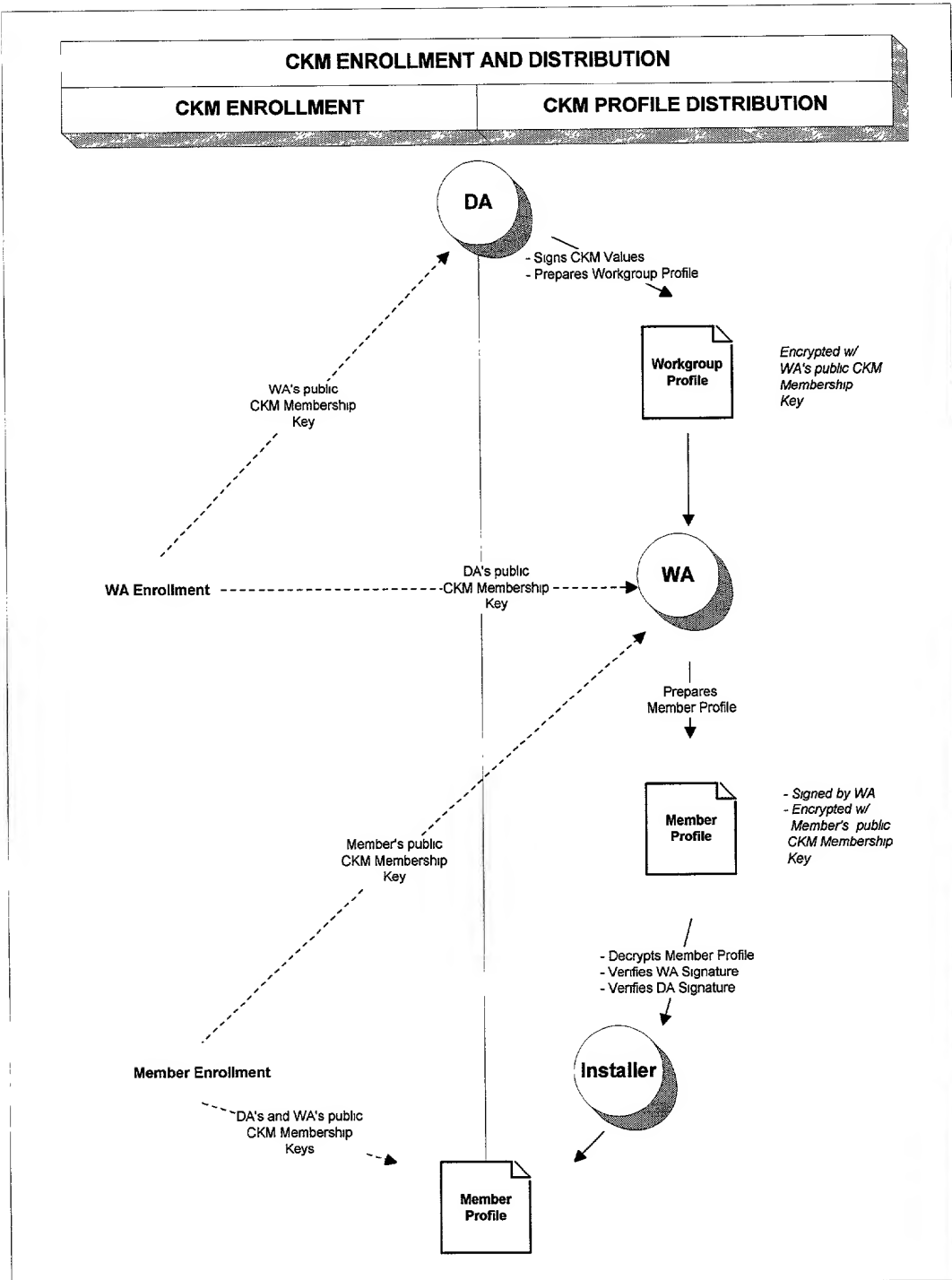


FIG. 16

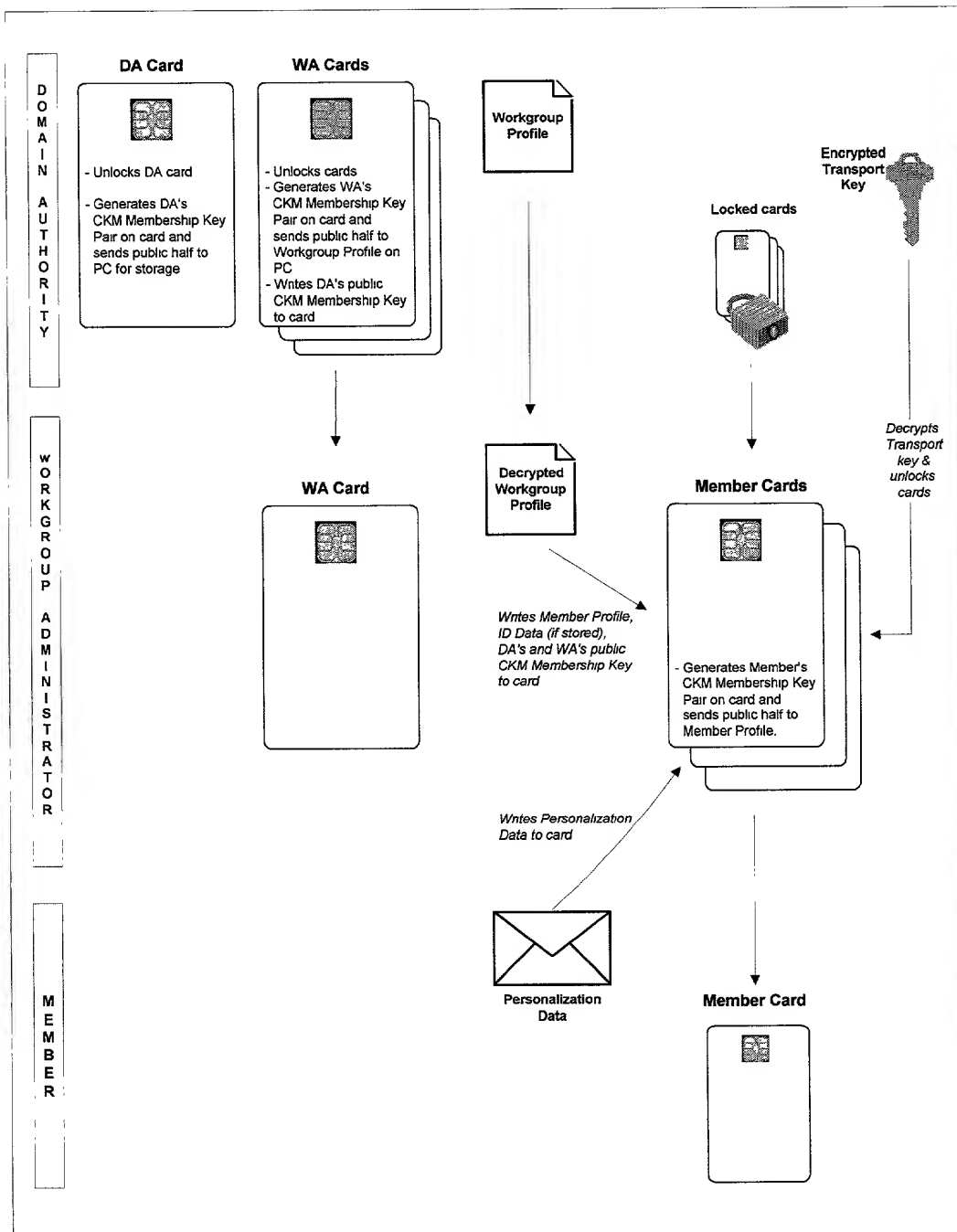


FIG. 17

FIG. 18

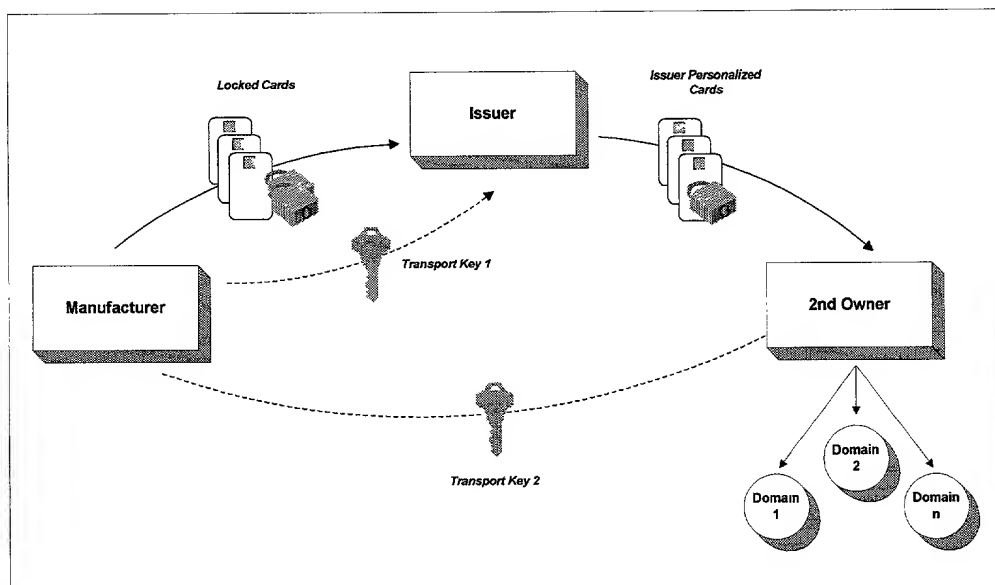


FIG. 19

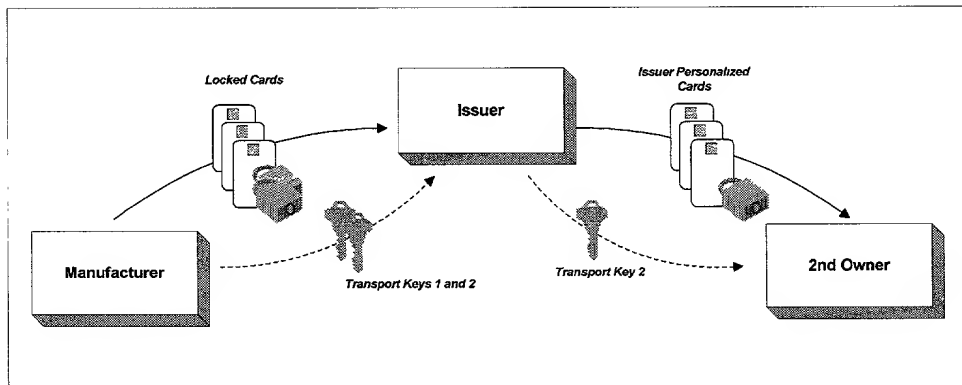


FIG. 20

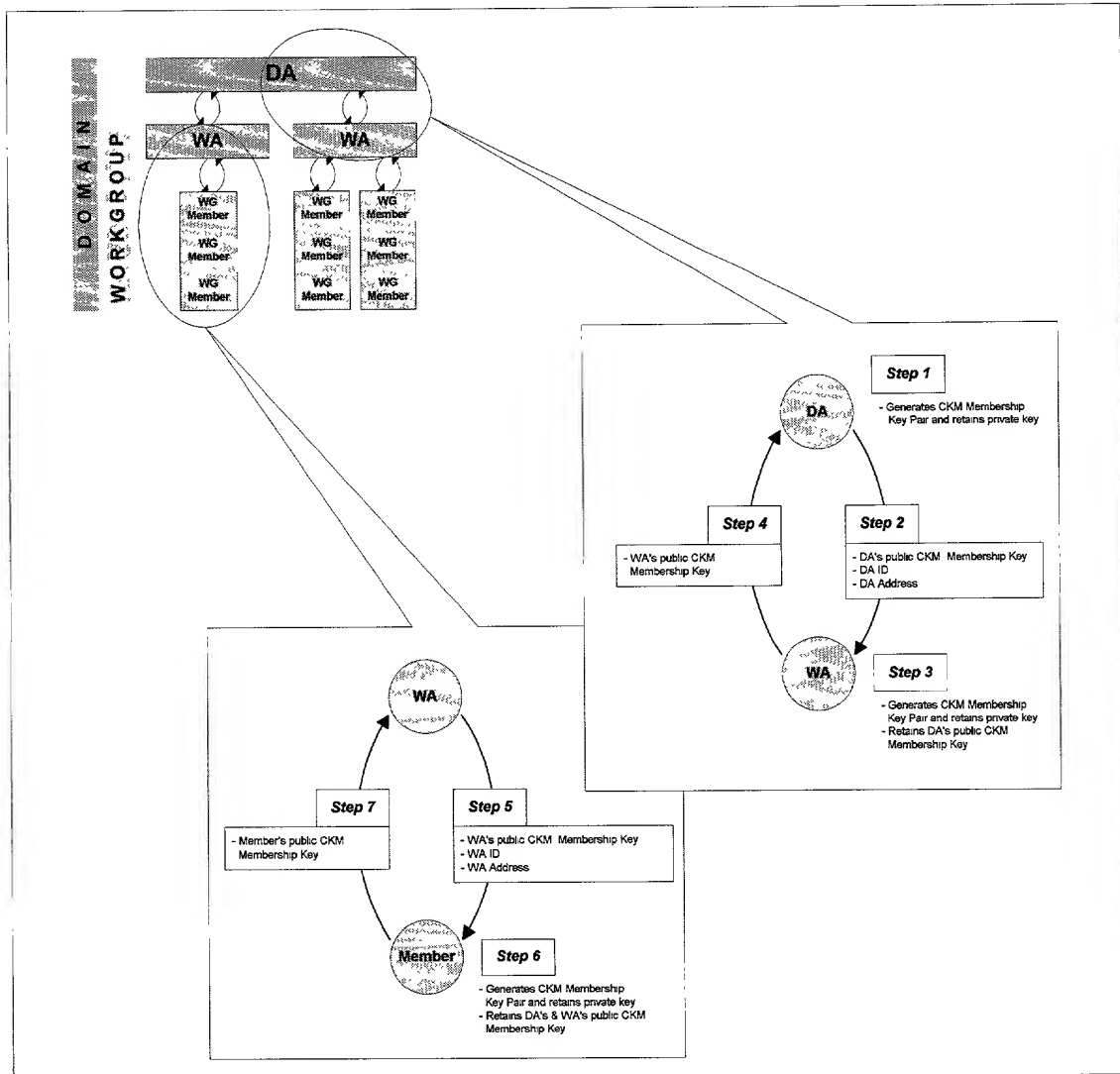


FIG. 21

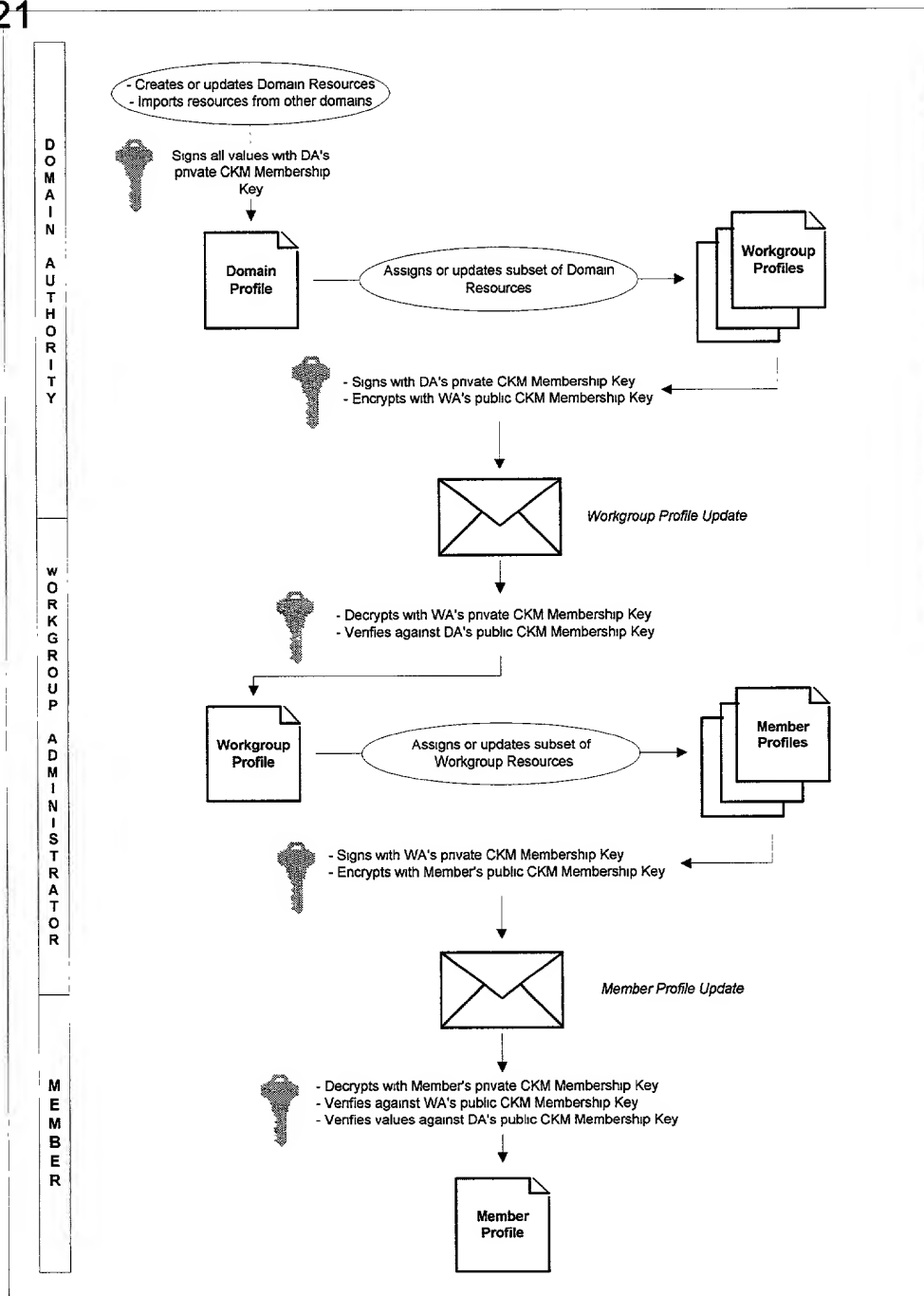


FIG. 22

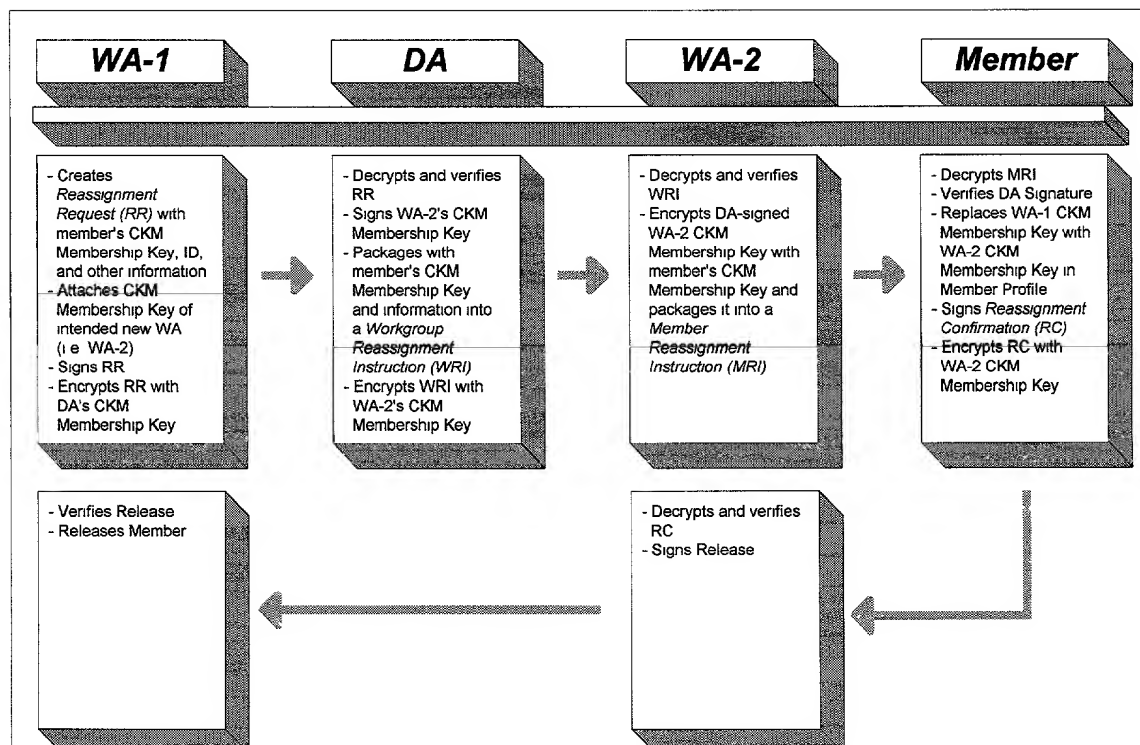
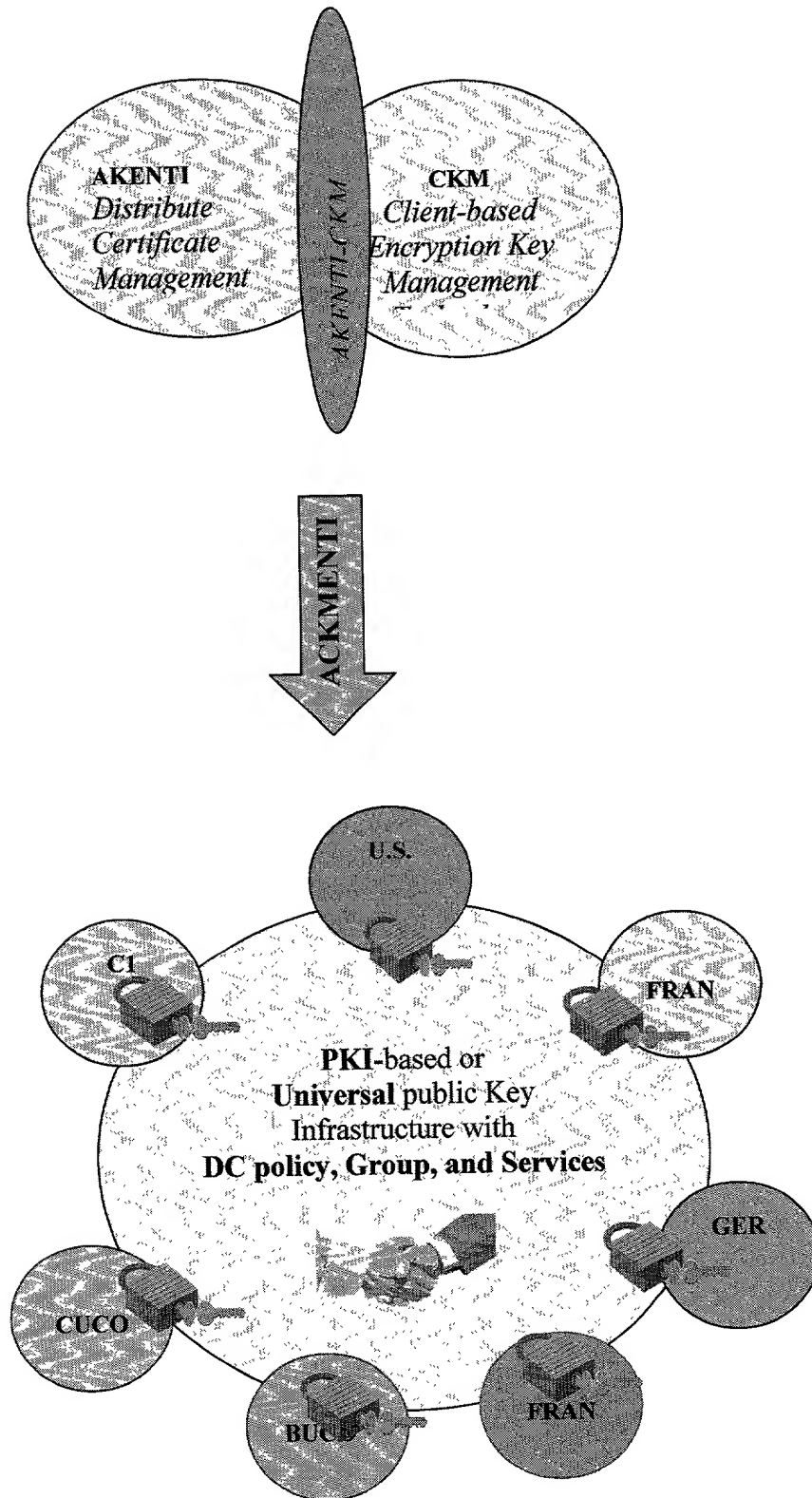


FIG. 23



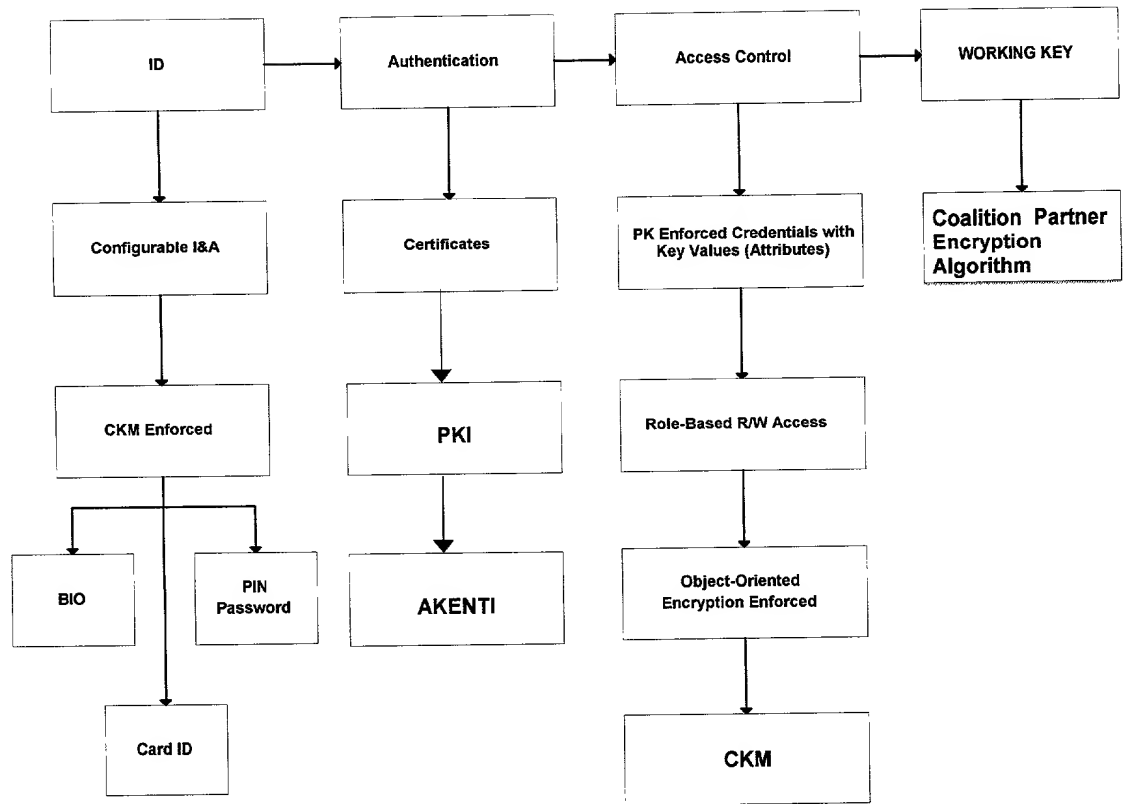


FIG. 24

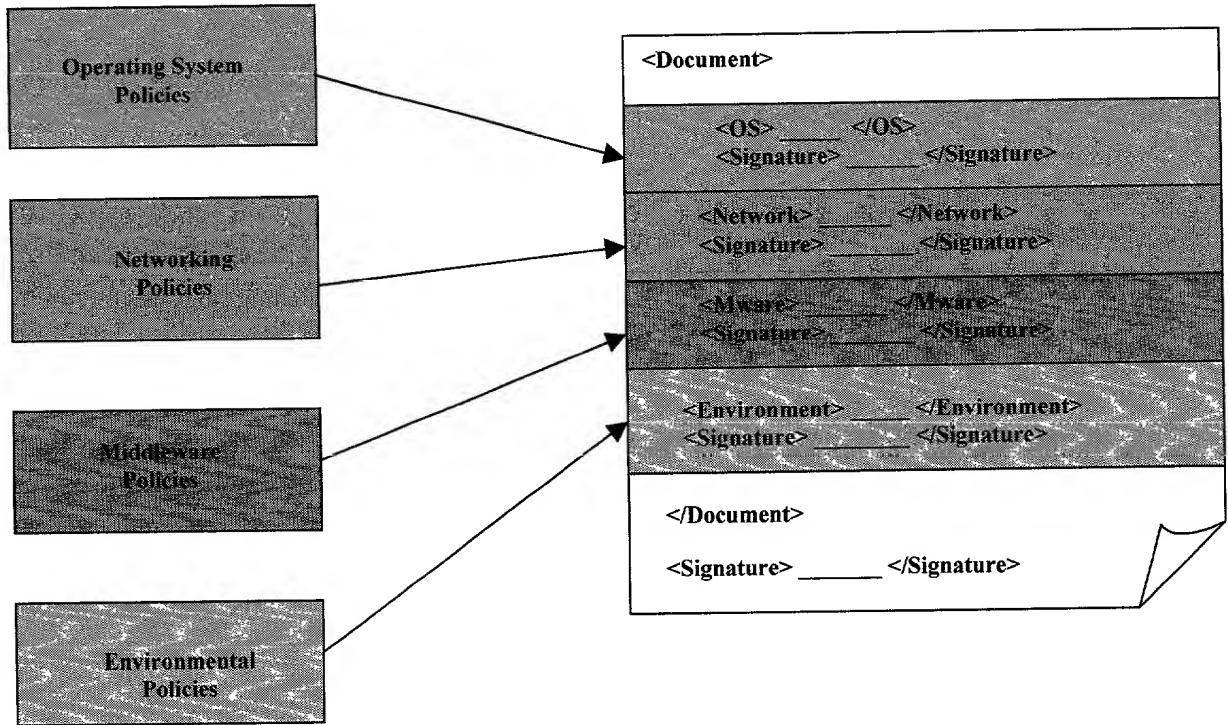


FIG. 25

FIG. 26

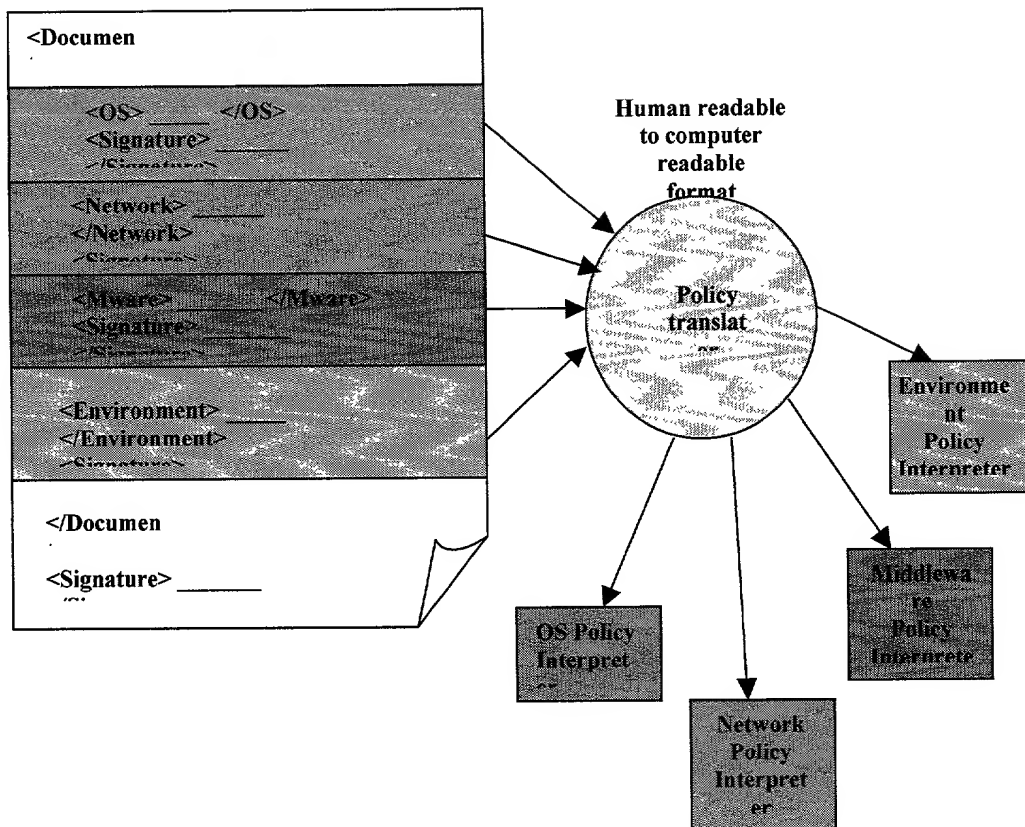
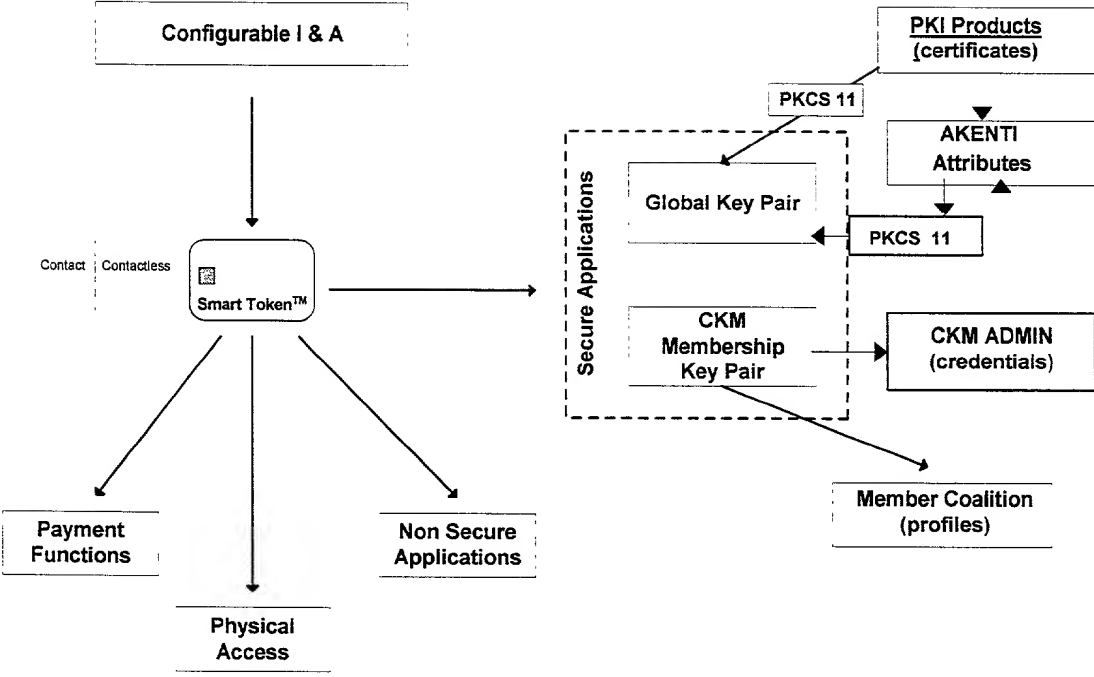


FIG. 27



CKM™ Constructive Key Management
I&A Identification and Authentication
PK Public Key
PKI Public Key Infrastructure

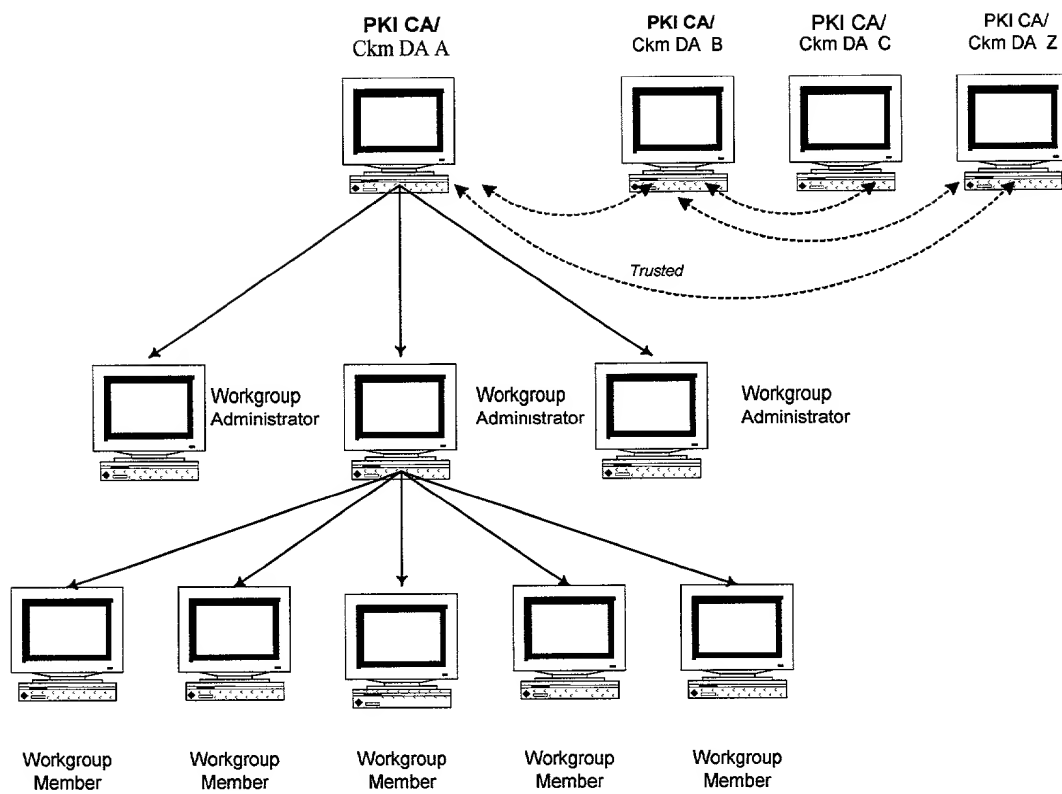


FIG. 28